

How Do I Shut It Down?

GCOR 32.20.2:

- 1. Properly secure equipment.
- 2. Fully apply independent brake; apply 20# to automatic brake.
- 3. Turn generator field switch to OFF position.
- 4. Remove and stow the reverser.
- 5. Move the engine control switch to Start/Stop/Isolate position.
- 6. If engine has been at throttle 4 or lower during the past 10 minutes, push the Engine Stop button until the engine stops.
- 7. Wait 5 minutes after the engine stops and open the battery switch. Five-minute wait is not required on low-horsepower engines.

Don't assume someone else will do it for you; ask questions about the locomotive's status.

Protect yourself and the company from fines for failure to shut down.



SHUTDOWN

FASTSIMPLESMART



THE LOWDOWN ON THE SHUTDOWN.



Shutting Down Idling Locomotives Benefits Everyone.

Far more than just a cost-saving initiative, shutting down locomotives reduces diesel emissions and benefits our environment, our communities, your family — and YOU! Air pollution is a public health concern, and the noise caused by idling locomotives can irritate community members. Sometimes locomotives are kept idling due to a variety of myths. You’ve probably heard most of them: *It won’t restart. The train will be late. It takes too long. We’ll lose our air conditioning. It’s not my responsibility.* Forget the myths. Shutting down idling locomotives is everyone’s responsibility, regardless of craft. Help out the environment and be a good neighbor — shut it down!

When Should I Shut It Down?

GCOR 32.20:

Shut down trailing diesel engines to be left standing **unattended for 1 hour** or longer. However, the lead locomotive of the consist may be left running if needed to maintain the air supply on the train. It is not necessary to shut down DPU locomotives unless instructed by the train dispatcher or local supervisors.

Other locomotives must also be shut down except when authorized by local supervisors or special instructions to be left running. The following guidelines apply:

- Keep the lead engine idling to maintain air pressure if coupled to a train and not equipped with AESS.
- Shut down trailing locomotives if the idle time is expected to exceed one hour. If you don’t know, shut it down.
- Shut down all light locomotives if outside air temperature is 40 degrees or more.
- Do not manually shut down locomotives with AESS or SmartStart if the system is enabled. (Indicator light shows green on EMD AESS and SmartStart. GE AESS displays “ready.”)
- Tag any locomotives with weak batteries or another condition that prevents starting.
- Local managers do not have the authority to allow diesel engines to idle.
- Report any locomotive with disabled AESS or SmartStart to the Mechanical Desk and the Engine Defect (ED) reporting system.

Automatic START/STOP

- Monitors water temperature, ambient temperature, brake pressure, etc., and shuts down the locomotive when all parameters are met.
- Starts the locomotive when one of the monitored parameters is not met.
- Locomotives equipped with Automatic Start/Stop are identified by decals or warning labels in the locomotive cab.



EMD AEES Locomotive *

Auto Start SHUTDOWN	
Auto-Start-Enabled Indicator	Green
Locomotive Reverser	Centered
Independent Brakes	Applied
Throttle Position	Idle
Reverser Position	Centered
Warning Device	Equipped with a siren that “chirps” when the system is activated. Siren blares when the system begins to shut down.
Troubleshooting	Check the EM2000 crew message.
Maintenance	Depress the EFCO switch prior to performing any maintenance.
Once the EFCO/STOP button or one of the locomotive’s protective systems is shut down, Auto Start is disabled. Manual re-start must be performed to start the locomotive.	

Auto Start RE-START	
Auto Start will not start a locomotive that it did not shut down.	
Auto-Start-Enabled Indicator	Green
Inhibit-Disabled Indicator	Extinguished
Throttle Position	Idle
Warning Device	Siren blares when the system begins starting up the locomotive.

Triggers	
Reverser Position	Move to forward or reverse.
Independent Brakes	Released
If locomotive fails to start after 20 seconds, Auto Start stops. Following a 2-minute cooldown, the sequence begins again. Auto Start attempts to re-start the locomotive three times.	

Manual Shutdown	
Disable Auto Start	Press the EFCO/STOP button.
Auto-Start-Enabled Indicator	Red

Auto Shutdown Delay	
10 minutes prior to shutdown: Press the reset key on the EM2000 screen for messages #3713 or #3637 to delay shutdown on a local unit for two hours.	

GE AEES Locomotive *

Auto Start SHUTDOWN	
Auto-Start-Enabled Indicator	IFD/LDM (or DID) displays “ready.”
Auto-Start-Disabled Indicator	IFD/LDM (or DID) displays “ready — engine stop control not active.”
Locomotive Reverser	Centered
Independent Brakes	Applied
Throttle Position	Idle
Reverser Position	Centered
EC Switch	NOT in JOG position
DC Locomotive	Aux. cab door closed
AC Locomotive	Barrier bar down & BFCO switch in normal position
Warning Device	Warning bell rings continuously for 30 seconds. Once shut down, warning bell rings for 1 second every 5 minutes.
Override	Press auto-stop override (AEES) button.
Troubleshooting	Check IFD/LDM (or DID Panel) display.
Maintenance	Once the EFCO/STOP button or one of the locomotive’s protective systems is shut down, Auto Start is disabled. Manual re-start must be performed to start the locomotive.

Auto Start RE-START	
Auto Start will not start a locomotive that it did not shut down.	
Auto Start (ASDS) Switch (if applicable)	On position
EC Switch	NOT in JOG position
Throttle Position	Idle
Warning Device	Warning bell rings continuously for 30 seconds.

Triggers	
Reverser Position	Move to forward or reverse.
Independent Brakes	Released
If the locomotive fails to start after 3 attempts, a start failure is logged. This AEES fault will not restrict the AEES to the inactive mode, and Auto Start attempts will continue as long as a crank restriction is not active.	

*To keep the air conditioner operating on EMD and GE AEES locomotives, press the Reset button on the lead locomotive after centering the reverser.

SMARTSTART (Low-Horsepower Locomotive) †

Auto Start SHUTDOWN	
Auto-Start-Enabled Indicator	On position, “green”
Locomotive Reverser	Centered
Independent Brakes	Applied
Throttle Position	Idle
Reverser Position	Centered
Warning Device	Siren turns “on” for about 20 seconds. Auto Start indicator will flash green & red. Once shut down, sirens will operate in “chirp” mode.
Maintenance	Depress the EFCO switch prior to performing any maintenance.
Once the EFCO/STOP button or one of the locomotive’s protective systems is shut down, Auto Start is disabled. Manual re-start must be performed to start the locomotive.	

Auto Start RE-START	
Auto Start will not start a locomotive that it did not shut down.	
Auto-Start-Enabled Indicator	On position, “green”
Throttle Position	Idle
Warning Device	Siren blares when the system begins starting up the locomotive.

Triggers	
Reverser Position	Move to forward or reverse.
Independent Brakes	Released
If the locomotive fails to start after 20 seconds, Auto Start stops. Following a 2-minute cooldown, the sequence begins again. Auto Start attempts to re-start the locomotive three times.	
When train is ready to depart, move reverser to appropriate direction for 90 seconds before releasing brakes.	

† The directions above apply to all locomotives retrofitted with SmartStart equipment, except CANAC RCL models.